

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended): A method for processing signal strength information from a radio frequency transmitter comprising the steps of:

receiving signal strength information indicating a power for the radio frequency transmitter at one or more first locations;

receiving location information representing a geographic location for one or more second locations;

dividing the received signal strength information into one or more subsets of signal strength information, such that the one or more subsets are determined based on a speed of a receiver of the received signal strength information;

determining, for each of the one or more subsets, a local mean, such that the local mean represents an average for one of the one or more subsets; and

estimating a location for the local mean based on the received location information.

2. (Original): The method of claim 1 further comprising the step of:

determining at least one distance between one or more estimated locations for one or more local means.

3. (Original): The method of claim 2 further comprising the step of:  
dividing the received signal strength information into one or more subsets based  
on the at least one distance.

4. (Currently Amended): The method of claim 3, wherein said step of  
dividing further comprises the step of:  
determining the at least one distance based on [[a]] the speed of [[a]] the  
receiver.

5. (Currently Amended): The method of claim 4, further comprising the step  
of:  
determining the at least one distance based on [[a]] the speed of [[a]] the receiver  
of the signal strength information.

6. (Currently Amended): The method of claim 2, further comprising the step  
of:  
interpolating [[a]] the local mean when the at least one distance exceeds a  
predetermined distance.

7. (Original): The method of 1, wherein said step of receiving location information further comprises the step of:

receiving location information for one or more second locations including one or more of the following: a latitude, a longitude, and at least one of a plurality of first time stamps from a receiver of global positioning system information.

8. (Original): The method of claim 7, wherein said step of receiving signal strength information further comprises the step of:

receiving said signal strength information as a set of signal strength data based on a signal trace.

9. (Original): The method of claim 8, further comprising the step of:  
attaching at least one of a plurality of second time stamps to the set of signal strength data.

10. (Original): The method of claim 9, further comprising the step of:  
smoothing the plurality of second time stamps based on the plurality of first time stamps.

11. (Original): The method of claim 10, wherein said smoothing further comprises the step of:

smoothing the plurality of second time stamps based on a slope for the plurality of first time stamps.

12. (Original): The method of claim 1, wherein said step of determining further comprises the step of:

determining a plurality of local means such that each local mean corresponds to one of the one or more subsets.

13. (Original): The method of claim 12, wherein said step of determining further comprises the step of:

averaging one or more of the plurality of local means to provide a window average.

14. (Original): The method of claim 13, wherein said step of averaging further comprises the step of:

determining a difference value based on one of the plurality of local means and the window average.

15. (Original): The method of claim 14, wherein said step of averaging further comprises the step of:

determining a plurality of difference values.

16. (Original): The method of claim 15, further comprising the step of:  
calculating a standard deviation based on the plurality of difference values.

17. (Original): The method of claim 16, further comprising the step of:  
determining a signal coverage at a location for a wireless device based on the  
following equation:

$$Cp(r) = \frac{1}{2} - \operatorname{erf} \frac{w_t - LM(r)}{\sigma_{LM}}$$

wherein  $r$  represents the location,  $\sigma_{LM}$  represents the standard deviation,  $LM(r)$   
represents the local mean corresponding to the location,  $w_t$  represents a service  
threshold for the wireless device, and erf is a normal distribution error function.

18. (Original): The method of claim 17, wherein said step of determining the  
signal coverage further comprises the step of:

defining the location as at least one of the one or more first locations.

19. (Original): The method of claim 1, further comprising the step of:  
defining the one or more first locations as locations that differ from the one or  
more second locations.

Claims 20-27 (Canceled).

28. (Currently Amended): A system for processing signal strength information  
from a radio frequency transmitter comprising:

means for receiving signal strength information indicating a power for the radio  
frequency transmitter at one or more first locations;

means for receiving location information representing a geographic location for one or more second locations;

means for dividing the received signal strength information into one or more subsets of signal strength information, such that the one or more subsets are determined based on a speed of a receiver of the received signal strength information;

means for determining, for each of the one or more subsets, a local mean, such that the local mean represents an average for one of the one or more subsets; and

means for estimating a location for the local mean based on the received location information.

29. (Original): The system of claim 28 further comprising:

means for determining at least one distance between one or more estimated locations for one or more local means.

Claims 30-31 (Canceled).

32. (Currently Amended): A system for processing signal strength information from a radio frequency transmitter comprising:

at least one memory comprising:

code that receives signal strength information indicating a power for the radio frequency transmitter at one or more first locations,

code that receives location information representing a geographic location for one or more second locations,

code that divides the received signal strength information into one or more subsets of signal strength information, such that the one or more subsets are determined based on a speed of a receiver of the received signal strength information, [[and]]

code that determines, for each of the one or more subsets, a local mean, such that the local mean represents an average for one of the one or more subsets[[; and]], and

code that estimates a location for the local mean based on the received location information; and

at least one processor that executes said code.

Claim 33. (Canceled).

34. (New) The method of claim 1, further comprising:  
varying the speed of the receiver.